

WE CLAIM:

1. A method performed by an intermediate entity for transparently handling communications between a client and a destination, comprising:
analyzing a client communication from the client that is addressed to a destination;
and
attempting to set up a connection with the destination.
2. The method of claim 1, further including:
determining whether the destination is a first type of destination or a second type of destination;
forwarding the client communication to the destination if the destination is a first type of destination; and
performing the step of attempting to set up a connection with the destination if the destination is a second type of destination.
3. The method of claim 1, further including:
sending to the client a connection setup acknowledgment having the address of the destination in the source field in response to a connection setup acknowledgment from the destination.
4. The method of claim 1, further including:
storing information associating the client and the destination.
5. The method of claim 4, further including:
creating a communication to the destination using the information associating the client and the destination in response to a service request from the client.
6. The method of claim 4, further including:
creating a communication to the client using the information associating the client and the destination in response to a destination communication from the destination.

5 7. The method of claim A, further including:
reading an address of the destination from a destination field of the client
communication; and
preparing an intermediate communication by storing the address of the destination in a
temporary field and by storing the address of an intermediate destination in the destination
field.

8. The method of claim 1, further including:
determining whether the client communication is a connection setup request; and
storing the address of an intermediate destination in a destination field in response to a
determination the client communication is not a connection setup request.

9. The method of claim 1, further including:
performing a service at the intermediate entity in response to a service request from
the client.

10. The method of claim 9, further including:
preparing a communication to the client based on performance of the service and
including the address of the destination in the source field.

11. An intermediate entity for transparently handling communications between a
client and a destination, comprising:
means for analyzing a client communication from the client that is addressed to a
destination; and
means for attempting to set up a connection with the destination.

12. The intermediate entity of claim 11, further comprising:
means for determining whether the destination is a first type of destination or a second type of destination;

means for forwarding the client communication to the destination if the destination is a first type of destination; and

wherein the means for attempting to set up a connection attempts to set up a connection in response to the means for determining making a determination that the destination is a second type of destination.

13. The intermediate entity of claim 11, further comprising:
means for sending to the client a connection setup acknowledgment having the address of the destination in the source field in response to a connection setup acknowledgment from the destination.

14. The intermediate entity of claim 11, further comprising:
means for storing information associating the client and the destination.

15. The intermediate entity of claim 14, further comprising:
means for creating a communication to the destination using the information associating the client and the destination in response to a service request from the client.

16. The intermediate entity of claim 14, further comprising:
means for creating a communication to the client using the information associating the client and the destination in response to a destination communication from the destination.

17. The intermediate entity of claim 11, further comprising:
means for reading an address of the destination from a destination field of the client communication; and

means for preparing an intermediate communication by storing the address of the destination in a temporary field and by storing the address of an intermediate destination in the destination field.

5 18. The intermediate entity of claim 11, further comprising:
means for determining whether the client communication is a connection setup
request; and
means for storing the address of an intermediate destination in a destination field in
response to a determination that the client communication is not a connection setup request.

19. The intermediate entity of claim 11, further comprising:
means for performing a service at the intermediate entity in response to a service
request from the client.

20. The intermediate entity of claim 19, further comprising:
means for preparing a communication to the client based on performance of the
service and including the address of the destination in the source field.

21. An intermediate entity for transparently handling communications between a
client and a destination, comprising:
an analyzing element for analyzing a client communication from the client that is
addressed to a destination; and
a connection setup element for attempting to set up a connection with the destination.

5 22. The intermediate entity of claim 21, further comprising:
a determining element for determining whether the destination is a first type of
destination or a second type of destination;
a forwarding element for forwarding the client communication to the destination if the
destination is a first type of destination; and
wherein the connection setup element attempts to set up a connection in response to
the determining element making a determination that the destination is a second type of
destination.

23. The intermediate entity of claim 21, further comprising:
a connection setup element for sending to the client a connection setup
acknowledgment having the address of the destination in the source field in response to a
connection setup acknowledgment from the destination.

24. The intermediate entity of claim 21, further comprising:
an association-creating element for storing information associating the client and the destination.

25. The intermediate entity of claim 24, further comprising:
a destination communication creation element for creating a communication to the destination using the information associating the client and the destination in response to a service request from the client.

26. The intermediate entity of claim 24, further comprising:
a client communication creation element for creating a communication to the client using the information associating the client and the destination in response to the destination communication from the destination.

27. The intermediate entity of claim 21, further comprising:
a reading element for reading an address of the destination from a destination field of the client communication; and
an intermediate communication preparation element for preparing an intermediate communication by storing the address of the destination in a temporary field and storing the address of an intermediate destination in the destination field.

28. The intermediate entity of claim 21, further comprising:
a connection setup request determining element for determining whether the client communication is a connection setup request; and
an address storing element for storing the address of an intermediate destination in a destination field in response to a determination that the client communication is not a connection setup request.

29. The intermediate entity of claim 21, further comprising:
a service performance element for performing a service at the intermediate entity in response to a service request from the client.

30. The intermediate entity of claim 28, further comprising:
a client communication preparation element for preparing a communication to the client based on performance of the service and including the address of the destination in the source field.

31. A computer program product comprising:
a computer usable medium having computer readable code embodied therein for transparently handling communications between a client and a destination, the computer usable medium comprising:

a module for analyzing a client communication from the client that is addressed to a destination; and

a module for attempting to set up a connection with the destination.

32. The computer program product of claim 31, further comprising:
a module for determining whether the destination is a first type of destination or a second type of destination;
a module for forwarding the client communication to the destination if the destination is a first type of destination; and

wherein the module for attempting to set up a connection attempts to set up a connection in response to the module for determining making a determination that the destination is a second type of destination.

33. The computer program product of claim 31, further comprising:
a module for sending to the client a connection setup acknowledgment having the address of the destination in the source field in response to a connection setup acknowledgment from the destination.

34. The computer program product of claim 31, further comprising:
a module for storing information associating the client and the destination.

35. The computer program product of claim 34, further comprising:
a module for creating a communication to the destination using the information associating the client and the destination in response to a service request from the client.

36. The computer program product of claim 34, further comprising:
a module for creating a communication to the client using the information associating the client and the destination in response to the destination communication from the destination.

37. The computer program product of claim 31, further comprising:
a module for reading an address of the destination from a destination field of the client communication; and
a module for preparing an intermediate communication by storing the address of the destination in a temporary field and storing the address of an intermediate destination in the destination field.

38. The computer program product of claim 31, further comprising:
a module for determining whether the client communication is a connection setup request; and
a module for storing the address of an intermediate destination in a destination field in response to a determination that the client communication is not a connection setup request.

39. The computer program product of claim 31, further comprising:
a module for performing a service at the intermediate entity in response to a service request from the client.

40. The computer program product of claim 39, further comprising:
a module for preparing a communication to the client based on performance of the service and including the address of the destination in the source field.

41. A method for transparently handling communications between a client and a destination, comprising:
sending a client communication from a client;
analyzing the client communication from the client that is addressed to a destination;
transmitting a connection setup communication to the destination to set up a connection with the destination; and
receiving the connection setup communication at the destination.

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42. The method of claim 41, further including:
determining whether the destination is a first type of destination or a second type of destination;
forwarding the client communication to the destination if the destination is a first type of destination; and
performing the step of attempting to set up a connection with the destination if the destination is a second type of destination.

43. The method of claim 41, further including:
sending to the client a connection setup acknowledgment having the address of the destination in the source field in response to a connection setup acknowledgment from the destination.

44. The method of claim 41, further including:
storing information associating the client and the destination.

45. The method of claim 41, further including:
creating a communication to the destination using the information associating the client and the destination in response to a service request from the client.

46. The method of claim 44, further including:
creating a communication to the client using the information associating the client and the destination in response to a destination communication from the destination.

47. The method of claim 41, further including:
reading an address of the destination from a destination field of the client communication; and
preparing an intermediate communication by storing the address of the destination in a temporary field and storing the address of an intermediate destination in the destination field.

48. The method of claim 41, further including:
determining whether the client communication is a connection setup request; and
storing the address of an intermediate destination in a destination field in response to a
determination that the client communication is not a connection setup request.

49. The method of claim 41, further including:
performing a service at the intermediate entity in response to a service request from
the client.

50. The method of claim 49, further including:
preparing a communication to the client based on performance of the service and
including the address of the destination in the source field.

51. A system for transparently handling communications between a client and a
destination, comprising:

means for transmitting a client communication from a client;

means for analyzing the client communication from the client that is addressed to a
destination;

means for transmitting a connection setup communication to set up a connection with
the destination; and

means for receiving the connection setup communication at the destination.

52. The system of claim 51, further comprising:

means for determining whether the destination is a first type of destination or a second
type of destination;

means for forwarding the client communication to the destination if the destination is
a first type of destination; and

wherein the means for attempting to set up a connection attempts to set up a
connection in response to the means for determining making a determination that the
destination is a second type of destination.

53. The system of claim 51, further comprising:
means for sending to the client a connection setup acknowledgment having the address of the destination in the source field in response to a connection setup acknowledgment from the destination.

54. The system of claim 51, further comprising:
means for storing information associating the client and the destination.

55. The system of claim 54, further comprising:
means for creating a communication to the destination using the information associating the client and the destination in response to a service request from the client.

56. The system entity of claim 54, further comprising:
means for creating a communication to the client using the information associating the client and the destination in response to the destination communication from the destination.

57. The system of claim 51, further comprising:
means for reading an address of the destination from a destination field of the client communication; and
means for preparing an intermediate communication by storing the address of the destination in a temporary field and storing the address of an intermediate destination in the destination field.

58. The system of claim 51, further comprising:
means for determining whether the client communication is a connection setup request; and
means for storing the address of an intermediate destination in a destination field in response to a determination that the client communication is not a connection setup request.

59. The system of claim 51, further comprising:
means for performing a service at the intermediate entity in response to receiving a service request from the client.

60. The system of claim 59, further comprising:

means for preparing a communication to the client based on performance of the service and including the address of the destination in the source field.

61. A system for transparently handling communications between a client and a destination, comprising:

an analyzing element for analyzing a client communication from the client that is addressed to a destination; and
a connection setup element for attempting to set up a connection with the destination.

62. The system of claim 61, further comprising:

a determining element for determining whether the destination is a first type of destination or a second type of destination;
a forwarding element for forwarding the client communication to the destination if the destination is a first type of destination; and
wherein the connection setup element attempts to set up a connection in response to the determining element making a determination that the destination is a second type of destination.

63. The system of claim 61, further comprising:

a client connection setup acknowledgment element for sending to the client a connection setup acknowledgment having the address of the destination in the source field in response to a connection setup acknowledgment from the destination.

64. The system of claim 61, further comprising:

a storing element for storing information associating the client and the destination.

65. The system of claim 64, further comprising:

a destination communication creating element for creating a communication to the destination using the information associating the client and the destination in response to a service request from the client.

66. The system of claim 64, further comprising:

a client communication creation element for creating a communication to the client using the information associating the client and the destination in response to the destination communication from the destination.

67. The system of claim 61, further comprising:

a reading element for reading an address of the destination from a destination field of the client communication; and

an intermediate communication preparation element for preparing an intermediate communication by storing the address of the destination in a temporary field and storing the address of an intermediate destination in the destination field.

68. The system of claim 61, further comprising:

a connection setup determining element for determining whether the client communication is a connection setup request; and

a storing element for storing the address of an intermediate destination in a destination field in response to a determination that the client communication is not a connection setup request.

69. The system of claim 61, further comprising:

a service element for performing a service at the intermediate entity in response to a service request from the client.

70. The system of claim 69, further comprising:

a client communication preparation element for preparing a communication to the client based on performance of the service and including the address of the destination in the source field.

71. A computer program product comprising:
a computer usable medium having computer readable code embodied therein for transparently handling communications between a client and a destination, the computer usable medium comprising:

5 a module for analyzing a client communication from the client that is addressed to a destination; and
a module for attempting to set up a connection with the destination.

72. The computer program product of claim 71, further comprising:
a module for determining whether the destination is a first type of destination or a second type of destination;

5 a module for forwarding the client communication to the destination if the destination is a first type of destination; and
wherein the module for attempting to set up a connection attempts to set up a connection in response to the determining module making a determination that the destination is a second type of destination.

73. The computer program product of claim 71, further comprising:
a module for sending to the client a connection setup acknowledgment having the address of the destination in the source field in response to a connection setup acknowledgment from the destination.

74. The computer program product of claim 71, further comprising:
a module for storing information associating the client and the destination.

75. The computer program product of claim 74, further comprising:
a module for creating a communication to the destination using the information associating the client and the destination in response to a service request from the client.

76. The computer program product of claim 74, further comprising:
a module for creating a communication to the client using the information associating the client and the destination in response to the destination communication from the destination.

77. The computer program product of claim 71, further comprising:
a module for reading an address of the destination from a destination field of the client communication; and

a module for preparing an intermediate communication by storing the address of the destination in a temporary field and storing the address of an intermediate destination in the destination field.

78. The computer program product of claim 71, further comprising:
a module for determining whether the client communication is a connection setup request; and

a module for storing the address of an intermediate destination in a destination field in response to a determination that the client communication is not a connection setup request.

79. The computer program product of claim 71, further comprising:
a module for performing a service at the intermediate entity in response to a service request from the client.

80. The computer program product of claim 79, further comprising:
a module for preparing a communication to the client based on performance of the service and including the address of the destination in the source field.